with migraine headache prophylaxis with topiramate versus amitriptyline. **METHODS:** Lifetime incidence and costs of cardiovascular disease (CVD) were estimated for patients receiving topiramate or amitriptyline as migraine headache prophylaxis. Projections were based on a model of the clinical and economic consequences of overweight and obesity, and data from a recent six-month controlled clinical trial of these agents, which demonstrated that they were equally effective in preventing migraines. Analyses were undertaken for a hypothetical cohort of 1000 women, aged 35 to 44 years at therapy initiation, with pre-treatment body mass index (BMI) of 28. Topiramate patients were assumed to experience a 1.26 unit decrease in BMI at six months, based on clinical trial data; and amitriptyline patients were assumed to experience an increase of 1.51; changes were assumed to persist over a lifetime. Model outcomes included expected lifetime cumulative incidence of coronary heart disease (CHD) and stroke, and life expectancy. Expected lifetime costs were calculated based on estimated event risk and associated medical-care costs, using a third-party payer perspective. Costs were discounted at 3% annually. **RESULTS:** As a result of changes in BMI, the estimated prevalence of hypertension, hypercholesterolemia, and diabetes was higher for amitriptyline versus topiramate at all future ages. Amitriptyline patients were also estimated to develop an additional 18 cases of CHD (per 1000 patients) compared to those receiving topiramate. Life expectancy was 0.4 years longer for topiramate patients, and their lifetime cumulative direct costs of CVD and metabolic disease were about $3500 lower than those for amitriptyline. **CONCLUSION:** Migraine headache prophylaxis with topiramate rather than amitriptyline may yield important clinical and economic benefits as a result of differences in induced changes in body weight.

PND12

IMPACT OF RELAPSES ON TOTAL COSTS OF CARE FOR PATIENTS WITH MULTIPLE SCLEROSIS

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OBJECTIVES: We investigate the impact of recurrent relapses on short- and long-term health care costs in the United States. Relapses in multiple sclerosis (MS) are a major burden on patients' welfare and related health care costs, and have been shown to impact residual disability. While relapse costs have been reported previously, no publication has examined the impact of recurrent relapses on total health care costs. **METHODS:** We used medical (International Classification of Diseases-9 diagnoses) and pharmacy claims from a large, US National Health Plan database to identify MS patients with >=1 relapse who had enrolled in the plan between 2002–2004, and who had continuous enrolment 6 months pre- and 12 months post-index relapse. Costs were estimated based on claim charges, and were adjusted to project the amount in 2005 US dollars. Analyses were stratified by newly or previously diagnosed patients, and the number of relapses. Costs are presented in 90-day intervals in reference to the index relapse period (days 0–30). **RESULTS:** Newly diagnosed patients with >=2 relapses had higher monthly costs compared with patients with 1 relapse only at days 0–30 (index relapse) ($26,890 vs. $16,121), 31–90 ($3597 vs. $1506), and 271–360 ($3768 vs. $1074). Although previously diagnosed patients with >=2 relapses had costs similar to those of patients with 1 relapse only at index relapse at days 0–30 ($21,350 vs. $21,015), monthly costs were higher for patients with >=2 relapses at days 31–90 ($3792 vs. $2712) and remained higher at days 271–360 ($3636 vs. $1676). Monthly costs were generally higher for previously diagnosed patients with the exception of the acute phase of relapse (days 0–30) in the >=2 relapses subset. **CONCLUSION:** Recurrent relapses are associated with increased costs, both in the acute phase of managing a relapse and during the follow-up year in both newly diagnosed and previously diagnosed patients.

PND13

HEALTH CARE COSTS AND UTILIZATION FOR ALZHEIMER'S DISEASE PATIENTS

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OBJECTIVES: To examine comorbidity associated with Alzheimer's disease (AD) and cost drivers using administrative claims. **METHODS:** We studied over-age-65 individuals with pharmacy benefits with employer-sponsored Medicare supplemental insurance in 2003–2004. AD patients were identified by having ≥1 claim with an AD diagnosis or ≥1 filled prescription for medication used exclusively for AD treatment in 2003. We used propensity scoring to select demographically-matched, non-demented Controls (3 : 1 ratio to AD) and compared these groups for disease prevalence (via a comprehensive classification system, Diagnostic Cost Groups (DCGs)), 2004 cost distributions, and reasons for ER visits and inpatient admissions. We used logistic regression to assess the marginal contribution of AD to the most common reasons for ER and inpatient admissions, using DCGs to control for total illness burden. **RESULTS:** Compared with controls (n = 75,327), AD patients (n = 25,109) have more comorbid medical conditions (8.1 vs. 6.5) and higher ($13,936 vs. $10,369) but less variable (CVs = 181 vs. 324) costs. Both groups expend one-third of overall costs on inpatient services, ≤29% on prescriptions, and ≥38% on outpatient services. Not only do more AD patients use ERs (27% vs. 42%) and hospitals (30% vs. 20%), but their hospitalizations are longer (3.38 vs. 1.93 days). Chest pain and contusion/superficial injury are the top two reasons for ER visits for both groups. Three of the top 4 reasons for inpatient admissions are also the same: pneumonia, hip fracture and heart failure. However, even after controlling for their excess illness burden, AD patients are at higher risk for hospitalizations due to hip fracture and pneumonia (odds ratios = 2.29 and 1.48, respectively). **CONCLUSION:** AD patients have significantly more comorbid disease, and are more likely to incur ER visits and inpatient admissions, than age-and-sex matched controls, even after adjusting for comorbidity differences.

PND14

ECONOMIC CONSEQUENCES OF THERAPEUTIC ALTERATION IN THE MANAGEMENT OF INSOMNIA

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OBJECTIVES: Pharmaceutical options for insomnia that treat both sleep induction and maintenance have only recently been launched in the U.S. The economic impact of treatment patterns with older drugs has not been thoroughly investigated in the literature. We hypothesized that since the older drugs only provided benefit for sleep induction, insomniacs who alternate therapy within one year of initiation would have greater economic burden compared to maintainers. **METHODS:** Treated insomnia patients were identified from Medstat Marketscan claims database with at least one prescription for existing insomnia agents during the study period (05/01/01 to 11/30/03).